cost of taxi transfer was greater among rural health facilities ($p = 0.093$).
Conclusions: Patient referral systems in Liberia are relatively unsystematic. While formal and informal mechanisms for referrals exist at both rural and urban health facilities, establishing guidelines for referral care practices and transportation strategies tailored to each of these settings will help to strengthen the healthcare system as a whole.

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A prospective evaluation of emergency patients presenting to 8-hour primary care clinics

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Background: Very little is known about the acuity case mix of patients presenting to eight-hour primary care facilities. Emergency centre triage identifies patients in urgent need of care and speeds up disposition to higher levels of care.
Objectives: To describe the acuity of patients presenting to eight-hour facilities, and to determine patient mode of arrival as well as the current triage practice.
Methods: A descriptive study of patients arriving at eight-hour primary care clinics in the Western Cape was conducted at four facilities in the Western Cape for a three-month period. The triage nurses collected routine observations from all monthly unscheduled walk-inpatients seen at these facilities. The Triage Early Warning Score was then calculated and the South African Triage Scale acuity level identified and recorded.
Results: A total of 1801 patients were included in the study. The total acuity distribution of the four facilities was as follow: emergency (0.3%), very urgent (15.3%), urgent (26.5%) and non-urgent (57.8%). The 2 smaller clinics (De Doorns and Heideveld) saw a higher percentage of emergency/very urgent/urgent versus non-urgent patients (85% versus 15%).
Conclusions: This study shows that eight-hour primary care facilities have a large proportion of urgent patients (42%) and would benefit from a standardised emergency centre triage tool for patients. Therefore it is recommended that the South African Triage Scale be implemented at these facilities as soon as possible.

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Mission impossible or border security – Practical and effective infection control on air ambulances

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Infection control on air ambulances is particularly difficult and although the principles have been well described in the hospital setting, not all of these can be applied to the air ambulance environment. Due to limited space, limited availability of running water and limitations on the amount of accessible equipment, the utmost care should be taken in upholding infection control principles. Infection control principles have to then be adapted to the air ambulance environment. These principles then have to be enforced by means of strict standard operating procedures (SOP's) and continuous crew training. So what principles and SOP's should be applied to create both practical and effective infection control programme for an air ambulance system?

Various principles can be introduced into an air ambulance system to optimise infection control processes. These include the use of "single use only" disposables, e.g., ventilator circuits and Bag Valve Masks, and needle-less systems. Furthermore, the "bare below elbows" (BBE) principle should be enforced while working with the patient. Minimum acceptable levels of personal protective equipment (PPE) should also be promoted. Cleaning of equipment and aircraft post flight is of utmost importance. Flight crew should sign documentation post flight to declare the aircraft safe and ready for use, for both ground crews as well as subsequent flight crew. In conjunction with this all patients should be swabbed when being admitted into the receiving facility. To evaluate if these principles are followed, random swabs of equipment and the aircraft should be done regularly on a monthly basis.

These principles have been applied to our air ambulance system based from Lanseria International Airport. By combining preventative and control measures, there has been no breach in our infection control strategies, as evidenced by no growth noted on specific and random swabs even when more and more "super bugs" are being identified in hospital. As an air ambulance service flying patients from various African countries, we have the responsibility to conduct our own "Border Security" to keep our hospitals, patients, aircraft and crews clean and safe. In this presentation we will share our "Border Security" principles and experiences with the audience.

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Managing your red, yellow and greens – A guide to safely manage transportation of highly contagious pathogens

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Transportation of highly contagious pathogens in the air ambulance environment is significantly different from the hospital setting. Not only is the patient confined to a specific ward or room in the hospital setting, but exposure to the patient can be controlled far more easily. In the air ambulance environment, the patient is being moved and thus all traditional methods to maintain barrier nursing principles need to be adjusted. Air Rescue Africa (ARA) operates two Isoark units specifically for the transport of highly contagious pathogens. A safe transport guide was essential for the safe and appropriate actions of medical flight crew.

The concept of a red, yellow and green zone was applied to the air ambulance transport environment and guidelines developed. These guidelines describe to the finest detail as when to engage with the patient, washing of the unit before moving into a new zone and when to undo a layer of protective clothing. Not all transferring facilities have these zoning principles in place for a safe transfer into the Patient Isolation Unit, so medical flight crew have to set up their own zoning system prior to examining a patient. A safety officer (3rd crew member) is responsible for monitoring the movement. This is done by following a step by step guide. The goal of this guide is to ensure safe movement of the patient in the isolation unit from the red zone, into the green zone, to ensure the unit can now be touched by flight and medical crew